Engineers Week

NASAGoddard Space Flight Center
Education Programs
Code 130.3
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Program Brochure
School/Teacher/Coordinator
2000-2001

Program Description

National Engineers Week is an annual event to help awareness and appreciation of engineers and their work. As part of this effort nationwide that links over three million engineers, teachers and students, GSFC civil servants and contractors visit classrooms to cultivate an interest in students to show how math, science and engineering create the world around us. In addition, presentations lead to inquisitiveness about technical careers.

Goddard Space Flight Center personnel visit participating schools and target their presentations to meet the needs of specific curriculum programs. This provides an opportunity to showcase not only the technological contributions of our nation's engineers, but for engineers to lead a variety of education and public programs that can contribute to the community. Be a part of taking engineering into your school. Through this outreach program, students can be led to discover how practical applications of math, science and technology can demonstrate real concepts.

Every day some two million engineers contribute to our way of life. Engineers have defined our most spectacular achievements, from moon landings to magnificent bridges. They direct our lives in so many ways that we can clearly benefit from: cars and computers, medicines and clean water, tools for safer and more efficient surgery; roller coasters and better energy delivery. As engineers help shape this new century, none will be more important than helping to protect and conserve our natural resources while providing the quality of life we have come to expect.

We urge you to help celebrate their achievements through National Engineers Week. Register now so your school/program can be insured of having an engineer visit you!

Involvement Process

The purpose of the speaker visitations is to provide a forum for participation in Engineers Week and to capture the interests of students and teachers within an atmosphere of inquisition. Both student and teachers are encouraged to actively participate in questioning that best exposes the world of engineering as seen through a different medium. *Students* are encouraged to pursue such questions as:

- Work that is done at GSFC
- Work Engineers do at GSFC
- Computer applications you have experienced
- Salary that is available

Teachers may link certain activities of engineering with the curriculum components as:

- How Math and Science education can apply
- Types of Engineers
- Levels of education required to work at GSFC
- How students can get involved at GSFC

Such preparation is encouraged through workshops given on behalf of the engineers in order to provide an opportunity for the speakers to plan the day and become comfortable with a presentation that will interest and engage students. These workshops are designed to facilitate transition of information from a conceptual base to one of inquisition The subsequent plan may focus upon four parts;

- Engagement – how to get students interest(demonstration activity)
- Explore – a presentation(slides, short video, power point)
- Explanation – involving students as a group or individually with a hands-on activity
- Evaluation – a period of questions

Engineer's Week Audience Interests

Students	Teachers
*Work done at GSFC	*How Math/Science education applies
*Work Engineers do at GSFC	*Types of Engineers
*What do you most enjoy about your work?	*Levels of education required to work at GSFC
*What do you do for fun?	*How Students can get involved at GSFC

Presentation Suggestions

The key to enlisting student interest and cooperation in any presentation type activity is the dimension of questions that can provide validity to the field of engineering. The following questions merely serve as suggestions for guiding the outline that may be used as a foundation for your presentation:

- What or who influenced your career decision?
- What was the best and worst advice you received about making a career choice?
- What biases do you feel the general public has about science and engineering?
- What career ladder did you follow? Was it the one you planned or was it an unexpected opportunity?
- What challenges have you had to face in your career?
- How important is math and science for an individual who wants to become an engineer?
- What career opportunities do you see in the future for engineers? Are there some areas of engineering more promising than others?
- How would you describe a typical day in the life of an engineer?
- What kind of tasks or jobs do you routinely perform as an engineer?
- Of all the projects you have worked on, which was the most interesting?
- Is working at NASA-GSFC as an engineer any different than working for a private company as an engineer?